Complete Summary

GUIDELINE TITLE

Induced abortion guidelines.

BIBLIOGRAPHIC SOURCE(S)

Davis VJ. Induced abortion guidelines. J Obstet Gynaecol Can 2006 Nov;28(11):1014-27. [86 references]

GUIDELINE STATUS

This is the current release of the guideline.

COMPLETE SUMMARY CONTENT

SCOPE

DISEASE/CONDITION(S)

Pregnancy termination

GUIDELINE CATEGORY

Assessment of Therapeutic Effectiveness
Counseling
Diagnosis
Evaluation
Management
Treatment

CLINICAL SPECIALTY

Family Practice
Internal Medicine
Obstetrics and Gynecology
Surgery

INTENDED USERS

Physicians

GUIDELINE OBJECTIVE(S)

- To provide an updated guideline for the surgical and medical termination of pregnancy
- To assist physicians to present their patients with available options appropriate to their circumstances, to develop a quality management program, based on available evidence, of the current methods for pregnancy termination, and to provide this service safely and effectively

TARGET POPULATION

Women seeking medical or surgical abortion in the first or second trimester of pregnancy

INTERVENTIONS AND PRACTICES CONSIDERED

Counseling/Evaluation/Diagnosis

1. Counseling on all options available
2. Obtaining patient's written consent
3. Preprocedural history and physical examination
4. Preprocedural screening for hemoglobin, Rh, rubella immunity, sexually transmitted infections, sickle cell disease, and bacterial vaginosis

Treatment/Management

1. Preoperative treatment with metronidazole and prophylactic antibiotics, as indicated
2. Procedure selection:
    - Medical abortion (methotrexate and misoprostol or misoprostol alone)
    - Manual vacuum aspiration (with preprocedural vacuum aspiration)
    - Dilatation and evacuation (D&E)
    - Abortion by labor induction
    - Hysterotomy (rarely used)
3. Pain management with non-steroidal anti-inflammatory medications, intravenous sedation, and paracervical block, alone or in combination
4. Intravenous oxytocin and intracervical vasopressin, as indicated

MAJOR OUTCOMES CONSIDERED

- Effectiveness of different methods of pregnancy termination in terms of complete abortion rates and failure rates

- Abortion complications

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases
Searches of Unpublished Data

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

The Medline, EMBASE, and Cochrane databases were searched for relevant articles published between January 1999 and July 2005 related to medical or surgical termination of pregnancy. In addition, specialist gynaecologists and physicians providing termination services were surveyed to determine current practices and opinions.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Weighting According to a Rating Scheme (Scheme Given)

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Quality of Evidence Assessment*

I: Evidence obtained from at least one properly randomized controlled trial

II-1: Evidence from well-designed controlled trials without randomization

II-2: Evidence from well-designed cohort (prospective or retrospective) or case-control studies, preferably from more than one centre or research group

II-3: Evidence obtained from comparisons between times or places with or without the intervention. Dramatic results in uncontrolled experiments (such as the results of treatment with penicillin in the 1940s) could also be included in this category

III: Opinions of respected authorities, based on clinical experience, descriptive studies, or reports of expert committees

*Adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on Periodic Health Exam.

METHODS USED TO ANALYZE THE EVIDENCE

Review of Published Meta-Analyses
Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Expert Consensus

DESCRIPTION OF METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

Classification of Recommendations*

A. There is good evidence to support the recommendation that the condition be specifically considered in a periodic health examination
B. There is fair evidence to support the recommendation that the condition be specifically considered in a periodic health examination
C. There is poor evidence regarding the inclusion or exclusion of the condition in a periodic health examination
D. There is fair evidence to support the recommendation that the condition not be considered in a periodic health examination
E. There is good evidence to support the recommendation that the condition be excluded from consideration in a periodic health examination

* Adapted from the Classification of Recommendations criteria described in the Canadian Task Force on the Periodic Health Exam.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Internal Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

These guidelines were reviewed by the Clinical Practice–Gynaecology Committee and the Social and Sexual Issues Committee and approved by the Executive and Council of the Society of Obstetricians and Gynaecologists of Canada (SOGC).

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

The quality of evidence (**I-III**) and classification of recommendations (**A-E**) are defined at the end of the "Major Recommendations."

Summary Statements

1. Women choosing pregnancy termination are entitled to quality care by trained practitioners. (**III**)
2. Preoperative treatment with metronidazole decreases the risk of postoperative pelvic inflammatory disease in patients with bacterial vaginosis. (**I**)
3. Medical abortion and suction curettage are safe and effective alternatives up to 56 days' gestation. However, medical abortion is associated with a higher rate of persistent viable gestation. (**II-1**)
4. Preprocedural cervical dilatation facilitates vacuum aspiration and decreases the incidence of cervical laceration and uterine perforation. (**II-2**)
5. Prophylactic antibiotics administered perioperatively with surgical abortion reduce the risk of post-abortal endometritis. (**I**)
6. Pain management for suction curettage may involve premedication with non-steroidal anti-inflammatory medications, intravenous sedation, and paracervical block, alone or in combination. (**III**)
7. Intravenous oxytocin and intracervical vasopressin, alone or in combination, decrease blood loss in surgical abortions in gestations of 15 weeks or more. (**I**)
8. Both medical termination and dilatation and evacuation (D&E) are safe and effective methods of uterine evacuation in the second trimester. Hysterotomy is associated with increased morbidity. (**II-3**)
9. Several effective methods of medical termination are available for use in the second trimester. Available evidence does not support the use of one method over another. (**III**)
10. Mechanical dilatation of the cervix prior to medical termination in the second trimester reduces the risk of cervical laceration and uterine rupture. Cervical ripening with prostaglandin is more likely to result in unsupervised delivery. (**II-2**)

Summary of Recommendations

1. Manual vacuum aspiration can be performed safely and effectively in an office setting up to 10 weeks' gestation. (**B**)
2. A cannula size in mm equal to or greater than the gestational age in weeks should be used for manual vacuum aspiration. (**B**)
3. First and second trimester abortions should be performed by experienced personnel in hospitals or outpatient facilities. (**B**)
4. If bacterial vaginosis is suspected, the patient should be treated with metronidazole perioperatively. (**A**)
5. Pre-abortion screening should include Rh status, and cervical cultures for sexually transmitted infections and bacterial vaginosis. Cervical cytology and sickle cell testing should be done when appropriate. (**A**)

6. Medical abortion with misoprostol and methotrexate should be considered in carefully selected patients who will be compliant with follow-up. (**A**)
7. A follow-up system must be in place to provide for surgical evacuation of the uterus if medical abortion fails. (**A**)
8. Ultrasound or measurement of beta-hCG levels should be used in follow-up in order to determine whether or not the uterus has been evacuated after medical abortion. (**B**)
9. A paracervical block with 0.5% or 1% lidocaine should be placed before vacuum aspiration. (**B**)
10. Pre-procedural dilatation of the cervix may be considered. Synthetic or osmotic dilators, laminaria tents, or misoprostol may be used. (**B**)
11. Perioperative prophylaxis antibiotic coverage should be used routinely in order to reduce the incidence of post-abortal infection. (**A**)
12. Physicians using intravenous medications and local anaesthesia must be trained in resuscitation and management of complications arising from the use of these medications. (**B**)
13. Gross examination of the fresh tissue must be made after surgical abortion. (**A**)
14. Medical induction and D&E are both safe and effective methods of second trimester termination. However, D&E is considered superior between 14 and 18 weeks' gestation. The particular technique should be selected according to the expertise of the physician and wishes of the patient. (**B**)
15. Oral, rectal, or buccal misoprostol, oxytocin infusion (intraoperatively or postoperatively), and intracervical injection of vasopressin, alone or in combination, should be performed with D&E in gestations longer than 14 weeks. (**B**)
16. Further research is needed to determine optimal regimens for medical termination in the first and second trimester. (**B**)

Conclusion

All therapeutic abortion techniques require proper training. Operators must be skilled, not only for the initiation of abortion, but also in the management of incomplete and failed procedures, uterine perforation, and such complications as hemorrhage, infection, and cervical laceration. Adequate training and ongoing experience using modern techniques with new methods will lead to a significant decrease in complication rates.

Definitions:

Quality of Evidence Assessment*

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the results of treatment with penicillin in the 1940s) could also be included in this category

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Classification of Recommendations**

A. There is good evidence to support the recommendation that the condition be specifically considered in a periodic health examination
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*The quality of evidence reported in these guidelines has been adapted from the Evaluation of Evidence criteria described in the Canadian Task Force on the Periodic Health Exam.

**Recommendations included in these guidelines have been adapted from the Classification of Recommendations criteria described in the Canadian Task Force on the Periodic Health Exam.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of supporting evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Overall Benefits

Safe and effective pregnancy termination procedures

See the original guideline document for discussion on the advantages of the pregnancy termination procedures.

POTENTIAL HARMS

Adverse Effects of Medications

- Oral administration of *misoprostol* is associated with more GI side effects, such as nausea and diarrhea. As the doses of misoprostol increase or the interval of administration decreases, the number and severity of side effects increase. In gestations greater than 20 weeks and with higher doses of misoprostol or decreased frequency of infusion (200 to 400 micrograms every 4 to 6 hours), uterine rupture has been reported in women with previous Caesarean section.
- Approximately 1% of patients will have an ongoing viable gestation that will require surgical evacuation because of the potentially teratogenic effects of misoprostol.
- During operative pregnancy termination (vacuum aspiration or dilatation and evacuation [D&E]) *general anaesthetics* (especially halothane or similar agents) appear to increase blood loss compared with local anaesthetics using intravenous narcotics and sedation.

Abortion Complications

- Cervical shock
- Infection
- Hematometra (post-abortal syndrome)
- Hemorrhage
- Perforation
- Failed attempted abortion
- The most frequent complication associated with induction is retained placenta.

See the original guideline document for discussion on disadvantages of the pregnancy termination procedures.

CONTRAINDICATIONS

CONTRAINDICATIONS

Contraindications to Medical Abortion

- Sensitivity to the medications
- Known coagulopathy
- Active liver or renal disease
- Severe anemia
- Acute inflammatory bowel disease

Contraindications to Manual Vacuum Aspiration

- Definite known allergic response to local anaesthetic
- Contraindication to local anaesthetic or drugs used for premedication
- Non-compliant or difficult patient
- Very young nulliparous women who are difficult to examine

QUALIFYING STATEMENTS

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- This guideline reflects emerging clinical and scientific advances as of the date issued and is subject to change. The information should not be construed as dictating an exclusive course of treatment or procedure to be followed. Local institutions can dictate amendments to these opinions. They should be well documented if modified at the local level.
- Induced abortion is a controversial topic that ignites complex and emotional debate. Unintended pregnancy is a problem that may never be fully resolved, and women who do not wish to continue a pregnancy will often seek out termination by any means, regardless of safety. This document is not meant to support either side of the abortion debate. Rather, it is intended to assist physicians to present their patients with available options appropriate to their circumstances, to develop a quality management program, based on available evidence, of the current methods for pregnancy termination, and to provide this service safely and effectively.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Safety

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

2006 Nov

GUIDELINE DEVELOPER(S)

Society of Obstetricians and Gynaecologists of Canada - Medical Specialty Society

SOURCE(S) OF FUNDING

Society of Obstetricians and Gynaecologists of Canada

GUIDELINE COMMITTEE

Not stated

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Principal Author: Victoria Jane Davis, MD

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

GUIDELINE STATUS

This is the current release of the guideline.

GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from the Society of Obstetricians and Gynaecologists of Canada Web site.

Print copies: Available from the Society of Obstetricians and Gynaecologists of Canada, La société des obstétriciens et gynécologues du Canada (SOGC); 780 promenade Echo Drive Ottawa, ON K1S 5R7 (Canada); Phone: 1-800-561-2416

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This NGC summary was completed by ECRI Institute on March 23, 2009. The information was verified by the guideline developer on March 25, 2009.

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